

CLAIMS

1. A method comprising:

accepting a set of configuration parameters;

5 accepting a data stream from a server;

transforming the data stream in response to the configuration parameters;

and transmitting the transformed data stream to a data stream client.

10 2. The method of claim 1 wherein the configuration parameters reflect the capabilities of a network that transmits information between the server and the data stream client.

3. The method of claim 2 wherein the capabilities of the network include bandwidth information for the network.

4. The method of claim 2 wherein the capabilities of the network include load information for the network.

20 5. The method of claim 1 wherein the configuration parameters reflect the capabilities of the data stream client.

6. The method of claim 1 wherein the capabilities of the data stream client reflect the amount of data the data stream client may accept in a data stream.

7. The method of claim 1 wherein the capabilities of the data stream client reflect the compression capabilities of the client.

8. The method of claim 1 wherein the capabilities of the data stream client reflect the number of data streams the client may accept.

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9. The method of claim 1 comprising:

accepting the data request of a second client; and

modifying the manner in which the data stream is transformed when sent to the data stream client.

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10. The method of claim 1 wherein the data stream is audio streaming data.

11. The method of claim 1 wherein the data stream is video streaming data.

12. The method of claim 1, wherein the transformation is transcoding.

13. The method of claim 1, wherein the configuration parameters include information on data stream requests.

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14. A method comprising:

accepting a set of configuration parameters;

accepting a data stream from a server;

transcoding the data stream in response to the configuration parameters; and

transmitting the transcoded data stream to a data stream client.

15. A method comprising:

accepting a set of configuration parameters including information on client capabilities and network component capabilities;

5 accepting a data stream from a server;

transforming the data stream in based on the configuration parameters; and

transmitting the transformed data stream to a data stream client.

16. A method comprising:

accepting a set of configuration parameters;

accepting a data stream;

converting the data stream in response to the configuration parameters;

transmitting the converted data stream to a first client;

accepting the data request of a second client; and

in response to the data request of the second client, modifying the manner in which the data stream is transformed when sent to the first client.

17. A method comprising:

20 accepting a data stream from a server;

accepting a set of parameters regarding a data path between the server and a client; and

transforming the data stream so that the maximum amount of data is transmitted in the data stream while allowing the data stream to maintain a minimum quality

requirement and setting the data stream bandwidth so that it is below an allocation.

18. The method of claim 17, wherein the allocation is based on the bandwidth and load of a network used to transmit the data stream.

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19. The method of claim 17, wherein the transformation is transcoding.

20. A method comprising:

accepting a data stream from a server;

accepting a set of parameters regarding a data path between the server and a client; and

transcoding the data stream while allowing the data stream to maintain a minimum quality requirement and setting the data stream bandwidth so that it is below an allocation, wherein the allocation is based on the bandwidth and load of a network used to transmit the data stream.

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21. A device practicing the method of claim 1.

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22. The device of claim 21, comprising a digital signal processor.

23. A device practicing the method of claim 17.

24. The device of claim 23, comprising a digital signal processor.

25. A device for converting streaming data sent by a server to a set of clients, the device comprising:
a data converter; and
5 a configuration memory holding data on the capabilities of a subset of the clients;
wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of a client.

26. The device of claim 25, wherein the data converter includes at least a digital signal processor.

27. The device of claim 25, wherein the device accepts configuration changes and, in response to such changes, alters the data conversion.

28. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a digital signal processor; and

20 a configuration memory holding data on the capabilities of a subset of the clients;

wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of a client; and wherein the device accepts configuration changes and, in response to such changes, alters the data conversion.

29. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter; and

5 a configuration memory holding data on the capabilities of a set of networks;

wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of the networks.

30. The device of claim 29, wherein the data converter includes at least a digital signal processor.

31. The device of claim 29, wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of a client.

32. The device of claim 29, wherein the device accepts configuration changes and, in response to such changes, alters the data conversion.

33. The device of claim 32, wherein the configuration changes include 20 information on client capabilities.

34. The device of claim 32, wherein the configuration changes include information on network capabilities.

35. The device of claim 30, wherein the configuration changes include information on data stream requests.

36. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter including at least a digital signal processor; and
a configuration memory holding data on the capabilities of a set of networks;
wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of a set of networks; and
wherein the device accepts configuration changes and, in response to such changes, alters the data conversion.

37. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter; and
a configuration memory holding data on the capabilities of a set of networks;
wherein the data converter converts the data stream into an output data stream for transmission to a client based on the capabilities of the networks and based on the capabilities of a client.

38. A method comprising:

accepting a data stream from a server;
accepting a set of configuration parameters;

for each client of a set of clients, transforming the data stream in response to the configuration parameters and transmitting the transformed data stream to said client;

accepting a modification to the configuration parameters; and

5 in response to the modification, modifying the data stream transformation for one or more of the clients.

39. The method of claim 38, wherein the configuration parameters include information on client capabilities.

40. The method of claim 38, wherein the configuration parameters include information on network capabilities.

41. The method of claim 38, wherein the configuration parameters include information on data stream requests.

42. A method comprising:

accepting a data stream from a server;

accepting a set of configuration parameters including information on client capabilities and network capabilities;

20 for each client of a set of clients, transforming the data stream in response to the configuration parameters and transmitting the transformed data stream to said client;

accepting a modification to the configuration parameters; and

in response to the modification, modifying the data stream transformation for one or more of the clients.

43. A device practicing the method of claim 42.

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44. The method of claim 42 wherein the transformation is transcoding.

45. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter means converting a data stream into an output data stream for transmission to a client based on the capabilities of a client; and

a configuration memory means holding data on the capabilities of a subset of the clients.

46. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter means converting a data stream into an output data stream for transmission to a client based on the capabilities of a set of networks and accepting configuration changes and, in response to such changes, altering the data conversion.

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47. A device for converting streaming data sent by a server to a set of clients, the device comprising:

a data converter means converting, using transcoding, a data stream into an output data stream for transmission to a client based on the capabilities of a set of networks and accepting configuration changes and, in response to such changes, altering the data conversion.